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DEP/40

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(E73-10462) TESTING FEASIBILITY OF  
DETECTING POTENTIAL LOCUST BREEDING SITES  
Progress Report (Centre for Overseas Pest  
Research, London) 2 p HC \$3.00 CSCL 06C

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Unclas  
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Dear Sir

Type I progress report for period 23 January to 22 April 1973

(Report No.3)

ERTS-1 Project SR-032

Testing feasibility of detecting potential locust breeding sites

The objective of this project is to locate by satellite areas of the Red Sea coastal plain of Saudi Arabia that are known to have been recently wetted by rain or where vegetation is growing.

During the reporting period, a further four sets of soil samples were collected and analysed for moisture content at the 51 sampling points set up between Jiddah and Badr. They were collected on 3 February, 20 February, 10 March and 28 March 1973, making a total of eight sets. Sampling has now stopped, following the statement by NASA that the remaining tape recorder on board ERTS-1 had been switched off on 30 March.

Imagery so far received covers almost all the Test Site Area at 18 day intervals from 22 November 1972 (the day sampling began) to 2 February 1973, with more broken coverage from 29 September to 4 November 1972. Most images are of excellent quality, but a few are dark.

The major disappointment has been the absence of suitable rains over the sampling area up to the date when the tape recorder was switched off. However, no rains have fallen subsequently and it is very unlikely that they will fall before early June, the time when sampling had been planned to stop. Thus, it will not be possible to test the feasibility of locating wet areas on the Red Sea coastal plain of Saudi Arabia. Moreover, vegetation in the sampling area, apart from isolated cultivations, has remained so sparse that it was undetectable by satellite.

Once again, no significant results can be reported, but there is very considerable promise that imagery of the remaining, unsampled, part of the Test Site Area will prove to be extremely useful in adding detail to the assessment of breeding leading to the upsurge in Desert Locust numbers that has fortuitously occurred over the Area since the middle of last year. This upsurge now appears to have ended, following timely control measures taken by the Saudi Ministry of Agriculture, with assistance from the Desert Locust Control Organisation for

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Eastern Africa. Several extensive ground and aerial surveys for vegetation cover were made for control purposes during the reporting period over the southern part of the Test Site Area between Lith and Qunfidah. Analysis of the records has started, and it is hoped they will be completed in time for the next report, together with a comparison with satellite imagery.

Yours faithfully

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